

DUTCHESS COMMUNITY COLLEGE		NEW YORK INSTITUTE OF TECHNOLOGY	
		2019	
<i>Associate in Science Computer Science (CPS)</i>		<i>Bachelor of Science Computer Science</i>	
Course	Credit	Course	Credit
First Semester: 17 credits			
ENG 101 Composition	3	FCWR 101 Writing I	3
BHS 103 Social Problems in Today's World	3	ICBS Behavioral Science Seminar [^]	3
Math - MAT 185 Precalculus*	4	MATH 141 Precalculus	4
CPS 141 Computer Science I	4	CSCI 125 Computer Programming I	3
SPE 101 Public Speaking	3	FCSP 105 Foundations of Speech Communication	3
Second Semester: 16-17 credits			
ENG 102 Composition II	3	FCWR 151 Writing II	3
American History (Appendix D)	3	FCIQ 101 Foundations of Inquiry [^]	3
Math - MAT 221 Calculus I*	4	MATH 170 Calculus I	4
CPS 142 Computer Science II	3	CSCI 185 Computer Programming II	3
Elective (b) <i>Recommended</i> : MAT 186 Intro Data Science	3-4	Computer Science Elective	3
Third Semester: 14-15 credits			
Science (c) <i>Recommended</i> : PHY 151 Calculus-Based Physics <i>or</i> CHE 121 General Chemistry I <i>or</i> BIO 105 General Biology I	4	Course Equivalent: PHYS 170 General Physics I <i>or</i> CHEM 110 General Chemistry I <i>or</i> BIOL 110 General Biology I	4
MAT 222 Calculus II*	4	MATH 180 Calculus II	4
CPS 231 Computer Science III/Data Structures	3	CSCI 260 Data Structures	3
Elective (b) <i>Recommended</i> : MAT 230 Prob and Statistics	3-4	CSCI 270 Probability and Statistics for Computer	3
Fourth Semester: 15-16 credits			
MAT 214 Discrete Math <i>or</i> MAT 215 Linear Algebra	3	CSCI 235 Elements of Discrete Structures <i>or</i> MATH 310 Linear Algebra	3
CIS 227 Computer Architecture and Organization	3	CSCI 135 Digital Logic Design Fundamentals	3
Elective (b) <i>Recommended</i> : Second semester of science PHY 152 Calculus-Based Physics II <i>or</i> CHE 122 General Chemistry II <i>or</i> BIO 106 General Biology II	3-4	Course Equivalent: PHYS 180 General Physics II <i>or</i> CHEM 150 General Chemistry II <i>or</i> BIOL 150 General Biology II	4
General Education Elective <i>Recommended</i> : ENG Literature <i>or</i> PHIL Philosophy	3	ICLT Literature <i>or</i> ICPH Philosophy Equivalent	3
Free Elective	3	Elective	3
TOTAL	62-65	TOTAL	62

[^]Transfer substitution awarded on the basis of this agreement.

*Note – Math transfer credit is based on course series of MAT 185, MAT 221, and MAT 222.

Different math or elective classes will be evaluated accordingly.

Note – Recommended courses are identified to maximize transfer credit award to NYIT.

Fewer credits may transfer if “Recommended” courses are not completed.

Program of Study at New York Institute of Technology:
Bachelor of Science in Computer Science

Courses to be completed at NYIT:

<u>Major Courses:</u>		<u>Credits</u>
ETCS 108	Computer, Internet and Society	3
CSCI 155	Computer Organization and Architecture	3
CSCI 235 <i>or</i>	Elements of Discrete Structures^ <i>or</i>	
MATH 310	Linear Algebra^	3
CSCI 300	Database Management	3
CSCI 312	Theory of Computation	3
CSCI 318	Programming Language Concepts	3
CSCI 330	Operating Systems	3
CSCI 335	Design and Analysis of Algorithms	3
CSCI 345	Computer Networks	3
CSCI 380	Introduction to Software Engineering	3
CSCI 455	Senior Project	3
Computer Science Concentration		9
 <u>Mathematics and Science:</u>		
Mathematics/Science Electives		2
Science Elective (Biology/Chemistry/Physics)^		3
 <u>Core and additional requirements:</u>		
FCSC 101	Foundations of Scientific Process	3
FCWR 304	Communication for Technical Professions	3
ICLT 3XX <i>or</i>	ICLT Literature Seminar^ <i>or</i>	
ICPH 3XX	ICPH Philosophy Seminar^	3
ICSS 309	Technology and Global Issues	<u>3</u>
 Total credits at New York Institute of Technology:		<u>59</u>
<i>^Requirement determined by courses completed at Dutchess CC</i>		



11/6/19

Dr. Babak Dastgheib-Beheshti, Dean
College of Engineering and Computing Sciences, NYIT

▪ *Effective Fall 2019*